

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/21/2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 02/21/2008 have been fully considered but they are not persuasive. The following reasons are why:

3. Applicants state that the Day reference does not teach that the bottom of the tube has a formation which snap fits with the bottom surface of the plate through the bore. Applicants also state that the tube disclosed can not engage the bottom surface of a storage tray and that tube itself does not in any way engage the bottom surface of the plate. Examiner respectfully disagrees.

4. First, Applicants state the Day reference does not teach the bottom of the tube has a formation which snap fits with the bottom surface of the plate through the bore. Examiner takes the position that Figure 2 shows an indent Item 22 where the tube and cap may snap-fit into a bore of a plate. Day further teaches that the tubes are used to be positioned into a cluster plate or well-plate [0003].

5. Second and third, applicants state the Day reference does not teach a tube that can engage the bottom surface of a storage tray and the tube itself does not in any way engage the bottom surface of the plate. Examiner would like to point out Day teaches that the cap may be fused to the tube using ultrasound (as a result will be one complete piece construction); which Examiner believes demonstrates the tube of Day may indeed engage the bottom surface of the plate.

6. Applicants state that Claim 13 recites relative sizes of the elements of the tube which are not disclosed in the Day reference. This is addressed below in the Claim rejections.

7. Finally, Examiner takes the position that the applicant is attempting to claim a tube, with an intended use - to engage the bottom of the bore of a plate. The Day reference teaches the structural limitations of the tube of the claimed invention both alone and with the combination of references listed in the prior office actions. The intended use is not given any patentable weight.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 6-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Day (US20020098126). Regarding Claim 1, Day teaches a tube for storing micro-litre [0003] volumes, the tube being open at one end and adapted to engage the bottom

surface of a multi-well plate having through bores, the tube comprising: A). A body portion of substantially square cross section [0089]; B). A shoulder portion at said one end of the body portion and providing the open end of the tube, the cross section of the shoulder portion being greater than that of the body portion [Figures 13 & 14]; and C). A formation providing a connector portion at the other end of the tube for snap fit [0013-0015] engagement through the bore with the bottom surface of the multiwell plate. Examiner takes the position that the patentability of the instant claim is to the structural limitations of the tube and not the multi-well plate or engaging the multi-well plate, which is an intended use.

3. For Claim 2, Day teaches a tube according to claim 1 further comprising a closure member disposed to close the open end [0003].
4. For Claim 6, Day teaches a tube according to claim 1 wherein the body and shoulder portions are formed separately from the snap fit connector portion ([0013] and [0026-0028]).
5. For Claim 7, Day teaches a tube according to claim 6, wherein the snap fit connector portion has a dot code on it ([0026-0028] and [0104]).
6. For Claim 8, Day teaches a tube according to claim 6, wherein the body and shoulder portions are formed from a translucent or transparent material ([0074] & [0013]).
7. For Claim 9, Day teaches a tube according to claim 8, further comprising a spigot at the interface between the body portion and the snap fit connector portion ([0096]).

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8. For Claim 10, Day teaches a tube according to claim 1, wherein the body portion and snap fit connector portion are co-moulded ([0076] & Claim 22).

9. For Claim 11, Day teaches a tube for storing fluid, the tube being open at one end and adapted to engage the bottom surface of a multi-well plate having through bores, the tube comprising: A). A body portion of substantially square cross section [0089]; B). A shoulder portion at said one end of the body portion and providing the open end of the tube, the cross section of the shoulder portion being greater than that of the body portion (Figures 13 & 14); and C). A flared connector portion at the closed end of the tube for snap-fit engagement through the bore with the bottom surface of the multi-well plate, said flared connector portion having an identification code provided thereon [0013-0015], [0026-0028], & [0104].

10. For Claim 12, Day teaches a tube according to claim 11, wherein the connector and body portions are formed separately from different materials ([0074] and [0094].

11. For Claim 13, Day teaches a tube for storing micro-litre volumes, the tube being locatable in a multi-well storage plate [0003] having opposite upper and lower surfaces and through bores extending between the surfaces for receiving corresponding tubes therein, the tube comprising: an upper body portion of substantially square cross section having an open upper end [0089]; a lower body portion having a closed bottom end and a reduced cross section sized for entering the corresponding through bore (Figure 5b); a shoulder portion located between the upper body portion and the lower body portion, the cross section of the shoulder portion being greater than that of the lower body portion for engaging the upper surface of the plate; and a formation disposed at the

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closed bottom end of the tube, said formation having an enlarged portion having a diameter larger than the lower body portion of the tube, whereby said formation extends beyond the lower surface of the plate to provide a connector for snap fit engagement with said lower surface (Figure 1). Examiner takes the position that the patentability of the claim is to the structural limitations of the tube and that the relationship to the multi-well plate is an intended use and therefore not given patentable weight.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Day in view of Helger et al (US3759374) and Stanchfield et al (US6479020). Day teaches a

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tube according to claim 1. Day does not teach wherein the closure member is neither a foil cap, self sealing member nor a split septum. Helger et al teaches the closure member comprising a foil cap (Column 2 lines 30-50) and Stanchfield et al teaches the closure member comprising a self sealing member or split septum (Column 11 lines 25-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Day in view of Helger et al and Stanchfield et al because according to Helger et al, using a foil cap can be advantageous when the sample of interest needs to be freeze dried and must be sealed for preservation reasons, sample containers sealed with foil caps provide a very good seal, can withstand an internal pressure of 2 atm, and the foil can be removed or punctured to remove the sample at a later time (Column 4 lines 50-60 and Column 5 lines 0-5). According to Stanchfield et al, the rubber materials are chemical resistant and are well known for forming septa for sealing round bottom flasks and Erlenmeyer flasks and other containers commonly used by researchers (Column 11 lines 29-40).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY RAMDHANIE whose telephone number is (571)270-3240. The examiner can normally be reached on Mon-Fri 8-5 (Alt Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bobby Ramdhanie, Ph.D./
Examiner, Art Unit 1797
BR

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1797